

ABSTRACT

Provided are a magnetic transducer having good thermal stability, a thin film magnetic head, a method of manufacturing a magnetic transducer and a method of manufacturing a thin film magnetic head. A stack of an MR element has a stacked structure comprising an underlayer, a first soft magnetic layer, a second soft magnetic layer, a nonmagnetic layer, a ferromagnetic layer, an antiferromagnetic layer and a capping layer, which are stacked in this order on the underlayer. The ferromagnetic layer is divided into a bottom layer and a top layer in the direction of stack. A ferromagnetic interlayer having magnetism and having higher electrical resistance than the electrical resistance of the ferromagnetic layer is formed between the bottom layer and the top layer. The ferromagnetic interlayer magnetically integrates the bottom layer with the top layer and limits a path for electrons moving through the stack, thereby improving the rate of resistance change. Furthermore, the ferromagnetic interlayer contains, as an additive, at least one element in a group consisting of Mn, Cr, Ni, Cu, Rh, Ir and Pt and thus prevents heat deterioration in the stack.

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